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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,919	02/20/2007	Ju-Ho Lee	51444	6873

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EXAMINER
BATISTA, MARCOS

ART UNIT	PAPER NUMBER
4134	

MAIL DATE	DELIVERY MODE
05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/577,919	LEE ET AL.	
	Examiner	Art Unit	
	MARCOS BATISTA	4134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05/01/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/01/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malkamaki et al. (US 20040228315 A1), hereafter "Malkamaki," in view of Tiirola et al. (US 20050041626 A1), hereafter "Tiirola."

Consider claim 1, Malkamaki discloses a method for supporting pilot boost to the uplink dedicated channels in the Wideband Code Division Multiple Access system comprising steps of (**see fig. 1, pars. 0023 and 0028**): transmitting E-TFCI to a Node B by a UE before transmitting a E-DCH corresponding to the E-TFCI (**see pars. 0044 and 0048**).

Malkamaki discloses the invention of claim 1 above, but does not particular refer to adjusting an uplink pilot power boosting amplitude by the UE according to the E-TFCI and performing a uplink inner loop power control by the Node B according to a measured SIR, a target preset by the inner loop power control and a pilot boost amplitude resulted from the E-TFCI.

Tiirola, in analogous art, teaches adjusting an uplink pilot power boosting amplitude by the UE according to the E-TFCI (**see fig. 5, pars 0007 lines 7-13 and 0040 lines 20-24**) and performing a uplink inner loop power control by the Node B according to a measured SIR, a target preset by the inner loop power control and a pilot boost amplitude resulted from the E-TFCI (**see fig. 7, par. 0029**).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Malkamaki and have it include adjusting an uplink pilot power boosting amplitude by the UE according to the E-TFCI and performing a uplink inner loop power control by the Node B according to a measured SIR, a target preset by the inner loop power control and a pilot boost amplitude resulted from the E-TFCI, as taught by Tiirola. The motivation would have been in order to decrease signal interference (see par. 0045).

Consider claim 2, Malkamaki as modified by Tiirola, teaches claim 1 above. Malkamaki also teaches wherein the UE transmits a D-TFCI and a DCH corresponding to the D-TFCI synchronously (see par. 0022 lines 10-13).

Consider claim 3, Malkamaki as modified by Tiirola, teaches claim 1 above. Malkamaki also teaches wherein the timing relationship on transmitting the E-TFCI in advance must satisfy that the ending time of E-TFCI's TTI must be earlier than the starting time of TTI of the E-DCH corresponding to the E-TFCI (see par. 0037).

Consider claim 4, Malkamaki as modified by Tiirola, teaches claim 1 above. Tiirola also teaches wherein when the uplink inner loop power control is performed by the Node B, if $SIR_{mea} < SIR_{target} + \Delta P_{pilot}$, the Node B sends a TPC UP command to demand the UE to increase the transmitting power; otherwise, it sends a TPC DOWN command to demand the UE to decrease the transmitting power (see pars. 0007 and 0029).

It would have been obvious to have modified Malkamaki's invention with the teaching of Tiirola. The motivation would have been in order to decrease signal interference (see par. 0045).

Consider claim 5, Malkamaki as modified by Tiirola, teaches claim 1 above. Tiirola also teaches wherein the UE calculates a transmitting power of the pilot according to the E-TFCI and equation: $P_{pilot} = P_c + \Delta P_{pilot}$ (see par. 0040 lines).

It would have been obvious to have modified Malkamaki's invention with the teaching of Tiirola. The motivation would have been in order to decrease signal interference (see par. 0045).

Consider claim 6, Malkamaki as modified by Tiirola, teaches claim 1 above. Tiirola also teaches wherein: a RNC notifies the Node B through an Iub signaling of the pilot power boosting amplitude corresponding to a reference E-TFCI, and notifies the UE through a RRC signaling of the pilot power boosting amplitude corresponding to the reference E-TFCI (see fig. 2, par. 0008).

It would have been obvious to have modified Malkamaki's invention with the teaching of Tiirola. The motivation would have been in order to decrease signal interference (see par. 0045).

Consider claim 7, Malkamaki as modified by Tiirola, teaches claim 1 above. Tiirola also teaches wherein the Node B and the UE calculate the pilot power boosting amplitudes corresponding to other E-TFCIs according to that corresponding to the reference E-TFCI (see fig. 2, par. 0029).

It would have been obvious to have modified Malkamaki's invention with the teaching of Tiirola. The motivation would have been in order to decrease signal interference (see par. 0045).

Consider claim 8, Malkamaki as modified by Tiirola, teaches claim 1 above. Malkamaki also teaches wherein the UE transmits the D-TFCI to the Node B before the transmission of the DCH corresponding to the D-TFCI (see pars. 0022 and 0037).

Consider claim 9, Malkamaki as modified by Tiirola, teaches claim 1 above. Malkamaki also teaches (see fig. 3, par. 0041).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lun-Yi Lao can be reached at (571) 272-7671. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Marcos Batista
/M. B./
05/07/2008

/LUN-YI LAO/
Supervisory Patent Examiner, Art Unit 4134